

**IN THE SPECIFICATION:**

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strikethrough~~.

Please REPLACE paragraphs [0007] and [0008] on page 2 with the following amended paragraphs:

**[0007]** Crystallization occurs ~~on~~at an amorphous silicon/molten silicon interface when cooling begins after irradiation of the laser beam is completed, wherein a temperature gradient is formed in such a way that the temperature of the silicon is gradually reduced from the amorphous silicon/molten silicon interface toward the ~~center~~central part of the molten silicon layer, the molten silicon solidifying, and crystallizing, as the heat dissipates.

**[0008]** Therefore, referring to FIG. 1B, a polycrystalline silicon thin film layer, having grains that are formed in a long cylindrical shape, is formed. Polycrystalline silicon grains are laterally grown until the molten silicon layer is completely solidified as heat flux flows from the mask interface to the central part of the molten silicon layer.

Please ADD the following new paragraph [0040.1] on page 8 between paragraphs [0040] and [0041]:

**[0040.1]** As is readily apparent from FIGS. 1A-1D and 2-10 and the description thereof in the specification, a primary grain boundary is a boundary where polycrystalline silicon grains grown in different directions meet. For example, FIGS. 1A and 1B show an example of a primary grain boundary where polycrystalline silicon grains grown from left to right meet polycrystalline silicon grains grown from right to left. Also, FIG. 4 shows an example of primary grain boundaries where polycrystalline silicon grains grown outward from an amorphous region on one side of a primary grain boundary meet silicon grains grown outward from an amorphous region on the other side of the primary grain boundary.